

What is claimed is:

1. A multiple discharge-servo curve control method of electrical discharge machine, which comprises of:
- 5 (1) input all of the pairs of the gap-voltage deviation and its corresponded machine precession rate of the discharge-servo curvature to build a multiple discharge-servo curve database;
- (2) define the numerical value of the discharge-servo curve parameters, which is depended on the processing conditions and the required discharge-servo curve to define a numerical
- 10 value for the discharge-servo curve;
- (3) according to the numerical value of the discharge-servo curve parameters, access the corresponding discharge-servo curve data kept in the discharge-servo curve database and record it into the multiple discharge-servo curve controller;
- 15 (4) input the processing instruction and the discharge-servo curve instruction in order to setup the processing program;
- (5) program node for judging the processing instruction, and the processing instruction will be executed by following the discharge-servo curve data that is stored insider the multiple
- 20 discharge servo-curve-controller as soon as program node being a calling instruction; and then
- (6) program node for judging the discharge-servo curvature, the n^{th} discharge-servo curve data will be accessed from the discharge-servo curve database and is then stored insider the
- 25 multiple discharge servo-curve-controller as program node

being a "discharge machining NO.n".

2. A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content of claim 1, wherein the discharge-servo curve that is defined
5 by the gap-voltage deviation and machine precession rate of the real discharge machining records of the different electrode material.
3. A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content
10 of claim 1, wherein the discharge-servo curve that is defined by the gap-voltage deviation and machine precession rate of the real discharge machining records of the different work-piece material.
4. A multiple discharge-servo curve control method of
15 electrical discharge machine, which comprises the content of claim 1, wherein the discharge-servo curve that is defined by the gap-voltage deviation and machine precession rate of the real discharge machining records of the different cutting solution material.
- 20 5. A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content of claim 1, wherein each discharge-servo curve owns its corresponded numerical value of the discharge-servo curve parameter set in the discharge-servo curve database.
- 25 6. A multiple discharge-servo curve control method of

electrical discharge machine, which comprises the content of claim 1, wherein the 1st discharge-servo curve owns its corresponded numerical value of the discharge-servo curve parameter set as "1" in the discharge-servo curve database.

- 5 7. A multiple discharge-servo curve control device of electrical discharge machine, comprising:

a storage unit, which keeps the discharge-servo curve data;

a setting unit, which sets the numerical value of discharge-servo curve parameter;

- 10 a reading unit, which access the discharge-servo curve data from the storage unit in according with the numerical value of discharge-servo curve parameter defined in the setting unit;

- a program unit, which provides the processing instruction of the machining program, the editing of the discharge-servo curve instruction and the initiation of the machining program,
15 moreover it executes the work-piece machining with the discharge-servo curve data; and

- an instruction-judging unit, which judge the machining program node to be the processing instruction or the discharge-servo curve instruction, obeying the discharge-servo curve instruction edited by the program unit, the processing program will call the discharge-servo curve instruction to match the real machining needs, swap the discharge-servo curve information and upgrade to the one-step machining with selectable multiple
20 discharge-servo curves.
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